

**METHOD AND SYSTEM FOR TIME BASED FILE STORAGE****Abstract of the Disclosure**

5 A method and system for interleaving storage of data streams on a rotating storage medium of a data storage device comprise dividing the storage medium into a plurality of logical zones. Each logical zone of the plurality of logical zones extends radially from an inner diameter of the storage medium to an outer diameter of the storage medium. Data from a first stream of data is written to a first logical zone of the plurality of logical zones for up to an amount of time corresponding to the rotational speed of the storage medium and the size of the first logical zone.